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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,266

05/16/2005

Hiroshi Watanabe

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EXAMINER

SCHATZ, CHRISTOPHER T

ART UNIT

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10/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,266	Applicant(s) WATANABE, HIROSHI	
	Examiner CHRISTOPHER SCHATZ	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,13,14 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 17 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Request for Continued Examination

1. The request filed on 09/05/2008 for a RCE under 37 CFR 1.114 based on parent Application No. 10/535,266 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (JP-2002268577, previously cited) in view of Chung (6496373, previously cited), and further in view of Wei et al. (US 20020193035).

As to claim 1, Kaneko et al. discloses a method of manufacturing a plasma display device having a panel in which a pair of substrates having transparency at least on a front side, the substrates being oppositely disposed so that discharge space and discharge cells are formed between the substrates, and a metallic holding plate 3 that supports the panel via a thermal conductive material (see the machine translation, [0002], [0006] and [0019]), said holding plate having outer edge; the method comprising: forming a pull-to-remove type adhesive 50, which are thermally conductive in order to allow heat to travel from the panel to the chassis; applying the adhesive to panel 1B and the holding plate 3 and bonding the panel to the holding plate together ([0023]). Kaneko et al. does not disclose that the adhesive is cured by application of heat as well as pressure.

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Chung teaches using a compressible and melt-flowable thermally conductive interface that is tacky and pressure sensitive in one embodiment in order to accommodate planarity tolerances between the substrates and is preferably cured under heat and pressure to reduce voids in the joint (abstract, col. 2 lines 12-13 and 20-24 and col. 6 lines 26-35). The use of a curable pressure sensitive adhesive would have additionally eliminated the need to clamp the components together. It would have been obvious to one of ordinary skill in the art at the time of invention to use the heat and pressure-curable pressure sensitive adhesive disclosed by Chung as the pressure sensitive adhesive disclosed by Kaneko et al. in order to form a joint that accommodates planarity tolerances between the substrates and has a reduced number of voids as well as to eliminate the need for clamping the components together after assembly.

Kaneko and Change are silent as to the formation of a groove at a periphery of the holding plate into which an adhesive flows. Wei discloses a method of manufacturing a display device, said method comprising providing a pair of transparent substrates 200, 204, wherein a groove 206 is formed at the periphery of at least one of said substrates, such that an adhesive 208 flows into said groove (figures 4, 5, 7a-7c; paragraphs 10-12; 20-27). Wei further discloses that the groove is positioned between the adhesive and an outer edge of the substrate, wherein the dimensions of the groove are sufficient to prevent adhesive from reaching the outer edge of the substrate wherein said substrates are bonded together (paragraphs 20-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a groove at the

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periphery of Kaneko's holding plate such that adhesive flows into the groove and does not reach the outer edge of the holding plate in order to control the flow of the adhesive as taught by Wei above.

As to claim 2, the pressure sensitive adhesive tapes are arranged on the width of the chassis and the panel and holding plate are bonded together (see [0008] and [0019] of the machine translation). Kaneko et al. is silent as to the method of bonding. However, Chung teaches bonding under heat and pressure simultaneously in order to reduce the number of voids and cure the adhesive (abstract, col. 2 lines 12-13 and 20-24 and col. 6 lines 26-35). It would have been obvious to one of ordinary skill in the art at the time of invention to cure the pressure sensitive adhesive described in the rejection of claim 1 under simultaneous pressure and heat as taught by Chen in order to prevent the formation of voids.

As to claim 17, Wei discloses that the groove surrounds the adhesive (figures 4 and 5).

Allowable Subject Matter

Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reasons said claims constitute allowable subject matter can be found in section 8 of the office action dated July 31, 2007.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 2 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER SCHATZ whose telephone number is 571-272-6038. The examiner can normally be reached on Monday through Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/CHRISTOPHER SCHATZ/

Examiner, Art Unit 1791

/Richard Crispino/

Supervisory Patent Examiner, Art Unit 1791